2020 CENSUS PROGRAM MEMORANDUM SERIES: 2022.03

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MEMORANDUM FOR: The Record

From: John M. Abowd (Signed January 13, 2022)

Associate Director and Chief Scientist, Research and Methodology

Subject: Consistency of Data Products and Formal Privacy Methods for the 2020 Census

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This memorandum releases the Consistency of Data Products and Formal Privacy Methods for the 2020 Census report authored by the JASON group. This report is in response to the Census Bureau's interest in engaging external organizations on the design of the 2020 Census Disclosure Avoidance System and the evaluation of the system's impact on the availability and fitness-for-use of 2020 Census data. As the 2020 Census Disclosure Avoidance System is based on the principles of formally private noise injection, a central question the Census Bureau needs to resolve in the system's design is the degree to which the injection of noise into published data to protect respondent confidentiality should be constrained to enforce consistency of published data across independent 2020 Census data products. The views, opinions, and/or findings contained in this report are those of the MITRE Corporation and the JASON group and should not be construed as an official government position, policy, or decision, unless designated by other documentation.

JASON is an independent group of scientists and engineers formed to work on problems of importance to the federal government in technical areas related to national security and public benefit. Founded in 1959, it has a long history of performing studies for elements of the federal government including the Department of Defense, the Department of Energy, and the Intelligence Community. JASON expertise is constantly refreshed through the addition of new members and spans the fields of science and engineering, including astrophysics, biology, chemistry, com\puter science, mathematics, oceanography & planetary science, physics, statistics, and various engineering disciplines.

The Census Bureau asked JASON to respond to the following questions:

- 1. Is consistency between the 2020 Census P.L. 94-171 Redistricting Data Summary File and the 2020 Census Demographic and Housing Characteristics File achievable?
- 2. Is consistency between the 2020 Census P.L. 94-171 Redistricting Data Summary File and the 2020 Census Demographic and Housing Characteristics File necessary?



3. What recommendations does JASON have on how to communicate with the data user community and other external stakeholders if we cannot achieve consistency between these two data products?4. What recommendations does JASON have for the 2030 Census and other data products with universe household frames (e.g., administrative record censuses)?

This report is being issued in the 2020 Census Memorandum Series in accordance with efforts to inform stakeholders of important actions related to the decennial census program, as outlined below.

The 2020 Census Memorandum Series

The 2020 Census Memorandum Series documents significant decisions, actions, and accomplishments of the 2020 Census Program for the purpose of informing stakeholders, coordinating interdivisional efforts, and documenting important historical changes.

A memorandum generally will be added to this series for any decision or documentation that meets he following criteria:

- A major program level decision that will affect the overall design or have significant effect on 2020 Census operations or systems.
- A major policy decision or change that will affect the overall design or significantly impact 2020 Census operations or systems.
- A report that documents the research and testing for 2020 Census operations or systems.

Visit 2020census.gov to access the Memorandum Series, the 2020 Census Operational Plan, and other information about preparations for the 2020 Census